

IN THE CLAIMS

1. (amended) A navigation system for use in a motor vehicle comprising:
a user I/O interface on the vehicle;
a means for providing position information on the vehicle;
a means for determining route information which receives a set of interval point requests from a user and timing information associated with corresponding interval point requests from the user via the user I/O interface, the timing information including the desired time to arrive at each of the interval point requests and a desired departure time from each of the interval point requests, and further wherein said route information is based on dynamic traffic condition information received by the system.

2. (original) A navigation system according to claim 1, wherein the means for determining route information provides at least one proposed route which may be accepted or rejected by a user.

3. (original) The navigation system according to claim 2, wherein the means for determining route information provides a plurality of proposed routes arranged according to a priority.

4. (original) A navigation system according to claim 3, further comprising a means for automatically determining a failure to maintain a route schedule and thereafter automatically replanning at least one route.

5. (previously amended) A navigation system according to claim 1, further comprising means for replanning a route automatically in response to a user rejection of route information while following a route between the interval points.

6. (previously amended) A navigation system according to claim 1, further comprising means for accepting a user amendment of system generated route information while following a route between the interval points.

7. (original) A navigation system according to claim 1, further comprising a means for accepting input to the system via voice commands.

8. (original) A navigation system according to claim 7, further comprising a means for receiving broadcast messages from a transmitter and wherein the broadcast messages are input to the system for use in calculating route information.

9. (amended) A method for generating navigation information for a vehicle comprising:

receiving information from a user I/O interface in the vehicle;

generating current position information of the vehicle;

determining at least one proposed route based on a set of interval point requests from a user and timing information associated with corresponding interval point requests from the user

in the vehicle, the timing information including the desired time to arrive at each of the interval point requests and a desired departure time from each of the interval point requests;

receiving dynamic traffic condition information; and

thereafter modifying a proposed route based on the dynamic traffic condition information.

10. (original) A method for generating navigation information according to claim 9, further comprising a step of allowing a user to accept or reject route information.

11. (original) The method for generating navigation information according to claim 10, further comprising a step of providing a plurality of proposed routes arranged according to a priority.

12. (original) The method for generating navigation information according to claim 9, further comprising a step of automatically determining a failure to maintain a route schedule and thereafter automatically replanning at least one route.

13. (original) A method for generating navigation information according to claim 9, further comprising a step of replanning a route automatically in response to a user rejection of route information.

14. (original) A method for generating navigation information according to claim 9, further comprising a step of accepting a user amendment of system generated route information.

15. (original) A method for generating navigation information according to claim 9, further comprising a step of accepting input to the system via voice commands.

16. (original) A method for generating navigation information according to claim 9, further comprising a step of receiving broadcast messages from a transmitter and wherein the broadcast messages are input to the system for use in calculating route information.

17. (new) A navigation system for use in a motor vehicle comprising:
a user I/O interface on the vehicle;
a means for providing position information on the vehicle;
a means for determining route information which receives a set of interval point requests from a user and timing information associated with corresponding interval point requests from the user via the user I/O interface, the timing information including the desired time to arrive at each of the interval point requests, and further wherein said route information is based on dynamic traffic condition information received by the system;

wherein the means for determining route information determines whether an interval point of the set of interval point requests may be reached by the desired time to arrive and provides an alternate interval point and route information to the alternate interval point if the requested interval point cannot be reached by the desired time to arrive.